PWM

SOUTH DELTA WATER AGENCY

4255 PACIFIC AVENUE, SUITE 2
STOCKTON, CALIFORNIA 95207
TELEPHONE (209) 956-0150
FAX (209) 956-0154
E-MAIL Jherrlaw@aol.com

March 23, 2007

Mr. Patrick Morris
State Water Resources Control Board
Central Valley Region
11020 Sun Center Drive, No. 200
Rancho Cordova, CA 95670

Re: Proposed Methyl Mercury TMDL

Dear Mr. Morris:

As you know, I have participated in the various workshops and discussions regarding the proposed TMDL referenced above. In those various forums, I have expressed my concerns about the approach being taken by Regional Board staff. My concerns are reflective of many in the agricultural community. After posing a number of questions arising from the March 16 workshop before the Board, I will suggest a different approach.

First, with regard to questions and issues raised at the workshop:

1. Does the data indicate that a decrease in aqueous mercury results in a decrease in the concentration of methyl mercury in fish tissue? Put another way, once mercury accumulates in the fish tissue, is its presence affected by a reduction in the "available" mercury in the food chain? If so, how long does it take for the accumulated mercury to "leave" the tissue, and what concentration of mercury in the water allows this process to proceed? If the accumulated mercury is not decreased by a decrease in the available mercury, how long is it expected to take for the proposed TMDL to become effective in protecting the beneficial use of fish consumption (i.e., how long before the contaminated fish are expected to die)?

2. What are the rates of travel for mercury and methyl mercury entering the Delta? If a project such as the Cache Creek settling basin traps mercury, how does that affect the amount of methyl mercury entering the Delta? Since 60% of the methyl mercury in the Delta originates

upstream of the Delta, why are most efforts under the proposed TMDL focused only portions of the 40% and not on the 60%?

3. It is my understanding that if a discharger does not contribute toward the studies during phase one, he/she will be in violation of the standard if his/her discharge contains methyl mercury above the "suggested" limit, unless he/she proves his/her contribution is less than the limit. Please confirm if this is indeed the case. What level of monetary contribution would satisfy this TMDL requirement?

4. How do you propose to handle/monitor the monetary contributions and studies of dischargers? Can the Ag Waiver Coalitions decline to be the mechanism by which funds for, and studies are conducted? If the limit is only a "recommendation" or "goal" as stated at the workshop, are the Coalitions required to include mercury in their sampling/testing programs? What is staff's position on Coalition requirements with regard to mercury "exceedances" above the limit? Would an exceedance require follow up testing and a management plan?

5. You stated at the workshop that the TMDL gives a credit for the amount of mercury in the source water. Please identify the supporting language in the TMDL.

6. How does the TMDL address such things as open water production of methyl mercury, which is not controlled by any user/discharger? Do the reductions assigned to each area or group of users include amounts ascribed to such uncontrolled areas as open waters?

7. The TMDL assumes that once methyl mercury production is better understood, groups such as agriculture can identify and implement BMP's to correct or lessen the production. This assumption appears to be based on an incomplete understanding of ongoing Delta agricultural practices. Some areas are below sea level, which means that absent an ongoing program of drainage, the land will become inundated due to seepage. These areas have deep ditches around and/or through their land into which the seepage collects and is pumped back into the channels. There is virtually no flexibility in this process, or the land becomes saturated and crop production infeasible.

In the South Delta most of the land is above sea level, but suffers from high saline ground water, inconsistent infiltration rates and high saline source water. [The latter in no small part due to the Regional Board's failure to implement an upstream salt standard for the past 30 years.] The result of these conditions is that the farmers must apply sufficient water at necessary intervals in order to keep enough water available for roots of the crops while at the same time flushing the salts out of the soil profile. Consequently, there are few if any opportunities for changes or the crop dries out, drowns, or is affected by salts.

Given these situations, it is unlikely that one could identify, much less implement changes in water application and removal processes which might affect methyl mercury production (assuming any actually occurs on/under these lands). Before embarking on a program which presupposes such changes are available or practical, staff should first explore these issues with agricultural interests so we do not start something which cannot result in improvement.

The better approach is as follows. Since the mercury problem is mostly a result of mining operations from the last two centuries, and since the responsible parties are not available for regulation, the obligation should be on the State as a whole. Therefore, the Regional Board should petition the legislature to address the problem of clean up of the various sources through a State program. The TMDL should be for mercury and not methyl mercury, with the vast majority of the required decrease assigned to the State. This approach should satisfy the various requirements of TMDL law.

Second, studies should be undertaken to discover more about the methylization process. If the Regional Board cannot afford the studies, it can assemble the various stakeholders and attempt to raise funds, including the use of bond monies controlled by the State Board. These studies should include test projects on various volunteers to determine which if any human activities create methyl mercury, and seek actions which will interrupt of prevent such production.

Third, activities which do contribute "new" mercury must be assigned a time frame under which their contributions will be decreased or stopped.

Fourth, a more effective program of notifying the public about the dangers of consumption should be instituted.

With this approach, the Regional Board does not start regulating a group hypothesized to contribute 2.2% of 5% of the problem as is currently the case with Delta agriculture. There appears to be no supportable reason to require a money contribution from such a small percentage of the problem, when addressing their "contribution" can have no appreciable effect of the problem.

Please call me if you have any questions or comments.

Very truly yours,

JOHN HERRICK

cc: Mr. Karl E Longley, Chair
Ms. Katherine Hart, Vice Chair
Mr. Paul Betancourt, Board Member
Mr. Christopher Cabaldon, Board Member
Ms. Cheryl K. Maki, Board Member
Ms. Sandra O. Meraz, Board Member
Ms. Soapy Mulholland, Board Member
Mr. Dan Odenweller, Board Member